

Mining In The West

The history of mining in the West takes us back to the very beginning of the Mormon development of Utah. General Taylor, who had watched the Mormon colonization, made the statement that, "The Mormons have got on the backbone of the Continent." Some few years later, President Lincoln, recognizing the vast wealth of the west, said, "Utah will yet become the treasure house of the nation." Yet, mining, which subsequently played such an important part in the development of Utah, had no place in the economic life of the early pioneers. They did not come west for material riches, but rather were seeking a refuge from religious persecution and desired first of all, to build permanent self-sustaining communities. So it was decreed that agriculture, home industry, such as the building of flour and woolen mills, churches, homes and schools, should be thoroughly established before the natural stores of minerals should be developed.

Some of their own men, members of the Mormon Battalion, had taken part in the discovery of gold at Sutter's Fort in California. They had shared in the wealth, and some of them were encouraged by Samuel Brannan (Mormon leader of the ship Brooklyn colony) to stay in California, as he thought that President Young would join them. But when word arrived in Utah of the gold discovery, President Young discouraged his people from joining the goldrushers. Speaking from the stand, he declared: "Do not any of you suffer the thought to enter your minds that you must go to the gold mines in search of riches. That is not the place for the Saints. Some have gone there and returned. They keep coming and going, but their garments are spotted, almost universally—Don't any of you imagine to yourselves that you can go to the mines to get anything to help yourselves; you must live here. This is the gathering place for the Saints. The man who is trying to gain for himself the perishable things of this world and suffers his affections to be staid upon them, may despair of ever obtaining a crown of glory."

President Young, upon many occasions, declared that the mountains of Utah were filled with precious metals, but he discouraged prospecting.

"We cannot eat silver and gold, neither do we want to bring into our peaceful settlements a rough frontier population to violate the morals of our youth, overwhelm us by numbers and drive us again from our hard earned homes." Sometimes men thought his advice hard, for the lure of finding quick wealth, silver and gold or other precious metals, has always been one of man's dreams, and men wanted to back their dreams with

works. Many pioneers, especially in the spring of the year, looked toward the mountains and canyons, felt they could find riches if they were allowed to prospect, but their leaders advised against it. Most of them obeyed.

MINING COAL AND IRON IN EARLY UTAH

Coal was sought by the pioneers soon after their arrival in the valley. Although the hills and mountains were covered with wood, the pioneers realized that they must not deplete the supply of timber by ruthlessly cutting it for firewood. By the close of 1850, coal was being burned in Salt Lake City, but transportation difficulties caused the 1854 Legislature to offer \$100 for discovery of a coal vein not less than 18 inches thick, within a radius of 40 miles from Salt Lake City. This offer did not bring result and for about 10 years thereafter, coal was sold in the valley for about 40 dollars a ton.

Thomas Rhodes, a roving hunter and explorer, who spent most of his time in Salt Lake City, discovered coal in the Coalville District quite by accident. He had gone out on a high promontory, called Skunks Point, presumably to scan the territory in search of game. He accidentally stumbled upon out-croppings of coal. He dug out some of the coal with his hunting knife and took the samples to President Young. Two years later (1860) President Young sent Samuel Fletcher and John Muir to investigate the possibilities of working Rhodes' discovery. Again chance entered to help fix the industries of this community. While attempting to secure meat for his comrades, Muir shot and wounded a deer. Not wanting to lose it, Muir called to Fletcher to help him trail the wounded animal. The two men came upon a ten-foot out-cropping of coal. The find was reported back to the church leaders and later they were developed as Church Mines.

During the early settlement days, hundreds of tons of Coalville coal were hauled into Salt Lake City by ox teams. These "Church Mines" were at Grass Creek. (Some of the church property is being operated through the Church Security Plan at the present time). Sometime later, other mines were developed, including the Home Coal Co. or Wasatch mine, and one developed by John Spriggs near town and extending under some of the town. (1868).

John O'Driscoll of Kamas hauled coal to Salt Lake City by ox teams in 1868-1869 where it sold for 35 dollars per ton. In 1870, the first coal was shipped by rail to Salt Lake, two carloads from the Wasatch mine. May 14, 1873, the first car of coal was shipped over the Summit County Railroad.—Mrs. Earnest Frost.

The first mines in Carbon Co. were at Scofield and Winter Quarters. In the late seventies, Peter Morgan and about fourteen men came over the hills from Huntington Canyon on foot, and settled in Pleasant Valley. We are indebted to them for the first important coal mines. The first mine they named Winter Quarters, from the fact that the miners intended to leave their mine before winter set in, but snow came so early they were compelled to stay until February, 1878.

A few years later, Castle Gate mines were opened, and a small coking

plant was built. This venture proved unsuccessful because Castle Gate coal was unfit for coking purposes. Then Sunnyside mines were opened and it was found that this coal was suitable for coking coal, so the largest coking plant in the United States under one supervision was built at Sunnyside. Following this, many independent mines were discovered until today the mining investment in Carbon County represents a total of \$40,000,000 with an average production of 3,550,000 tons of coal per year. More than 20 mines are located in this district. Despite this expansion we are told that coal mining industry is in its infancy, for the United States survey maintains that one-sixth of the state is under-laid with beds of coal.

SOME FACTS REGARDING THE COAL MINE NEAR WALES, SANPETE COUNTY, UTAH

Coalville, Utah, is named by historical authorities as the location of the first commercial coal development in Utah. This was about 1856. However, just prior thereto, coal was discovered near Wales, Sanpete County. The Wales coal, however, was of no importance commercially until the year 1878, being too remote from rail transportation and having a very limited local demand. Wood at this time was plentiful, near Sanpete County towns, and money was scarce. The main use of Wales' coal in the early days was for blacksmithing. It was and is the best blacksmithing coal in Utah. The same condition applies as to coke. Prior to the production of coke by the Utah Fuel Company in Carbon County, the best Utah coke would have been the product from the Wales' mine. The coking possibility was the reason for "great expectations" the owners had regarding this property. About the year 1876, a company was formed to develop the mine. They purchased some of the developed coal land, acquiring adjacent property from the U. S. Land Office, and erected a small plant for manufacturing coke. Their plan was to be ready for production when the Utah Southern Railroad reached Nephi, anticipated and accomplished about 1878.

The owners of the Wales Coal property desired to construct a railroad from Nephi to the mines, being of the opinion that they would have a good market for coal and coke. They were unable to carry out their plans and arranged for Mr. Simon Bamberger to try and dispose of their holdings. Mr. Bamberger was assisted in his efforts by Mr. Chas. Bennett, a prominent Salt Lake attorney. These gentlemen went to London and were successful in their mission. The company organized in London was the Central Pacific Coal and Coke Company, Limited. It was a strong company headed by Sir Henry Tyler, who at that time was President of the Grand Trunk Railroad of Canada. The men organizing the Central Pacific Coal and Coke Company were friends and associates of Sir Henry Tyler. It was thought at that time that the enterprise would be successful. The company had sufficient funds to develop the coal property and construct the 27 miles of narrow gauge railroad from Nephi to the mines, via Salt Creek Canyon and the base of the San Pitch mountains, in the western part of Sanpete Valley. The company entered into a contract with Mr. Bamberger for the construction of the Sanpete Valley Railway. This railroad was constructed in 1880.

The amount of coal mined at Wales was small. The annual quantity

being approximately 4,000 tons per year, from 1878 to 1893. Since 1893, a very small production has applied.—H. S. Kerr.

IRON AND COAL MINING INDUSTRY IN IRON COUNTY

The pioneers had no sooner settled in the valley of the Great Salt Lake than they began to look for coal and iron, and by the close of 1850, after Brigham Young had offered prizes for the discovery of coal, it was found in abundance and was used in Salt Lake City that season. Likewise, it was seen from the first, that iron would be needed for plowshares, wire, scythes, cradles, as well as household utensils such as stoves, skillets, also wagon tires, horse and oxen shoes, nails, etc. Such things were difficult to transport across the plains and Brigham Young emphasized the importance of iron and the need of an iron foundry. During the summer of 1849, plans for a foundry were completed, and a call for skilled help was sent throughout Western Europe for "blowers," moulders, and all kinds of furnace operatives, and for skilled workmen in assaying, mixing, and dividing and proving all sorts of metals and minerals.

In November, 1849, a commission from Governor Young and the Legislative Assembly authorized Parley P. Pratt with a company of fifty, to leave at once on an exploring expedition of Southern Utah. The experience and privations of this party from Salt Lake City to the Santa Clara and return were filled with suffering and brave endurance. Upon their return in February, 1850, they reported that there were favorable places for the building of towns, dwelling emphatically upon the great quantity of iron ore unsurpassed in quality. The people were aroused to the importance of the find, and were joyful over the fact that "no longer would the housewife and the husbandman know the lack of iron utensils and implements, but a railroad would soon be built across the desert plains to assist in the great work of immigration."

Following this report, George A. Smith, was selected leader of a company of one hundred, with supplies and equipment to go South into Iron County to build a colony and to establish an iron factory. This company left Salt Lake City, December 7, 1850, and reached what is now Parowan, in thirty-nine days of travel in mid-winter through almost trackless territory. After helping in the establishment of Parowan, Henry Lunt and others were detailed by George A. Smith to locate and create a settlement farther south. This town was known at once by its name because of the beautiful cedar trees on the chosen spot.

In the fall of 1851, a company called the "Scotch Company," was sent to settle the "Little Muddy." This company came through Parowan and joined the Lunt Company, coming on to Cedar Valley. John Chatterly and John Urie were also in this company. They arrived in the valley November 11, 1861, the fort which they commenced was at once called Cedar. Soon after the remaining part of the company arrived and preparations were made for spending the winter there. About this time a piece of coal was discovered in the bed of the creek. Other coal was soon discovered in the canyon and the name of the creek was changed from "Little Muddy" to Coal Creek.

About eight miles west of Cedar City commences a chain of mountains, many peaks of which are composed almost entirely of rich iron ore, and strewn about their base are fragments of every size. With a view to the

final settlement of Iron County, and of iron works in the immediate vicinity of this ore, the settlement of Parowan was founded in 1851, and was established for farming purposes, some twenty miles from the anticipated locality of the iron works, in order to serve as a source of supply to those who might be engaged in them.

Cedar City, located on Coal Creek, about eight miles east from the iron mountains and only two miles from the mouth of the Coal Creek Canyon, at that time accessible only to footmen, but having unlimited coal, was founded in 1851-52. The first winter was occupied by the settlers in building houses to shelter them from the cold and storm. These houses were put up in the form of a fort, with intervals between the houses. Here were a few determined men and women buffeting the storms of winter, with no shelter but their wagons for themselves and their families; dependent upon the stores of a new and weak settlement for supplies of bread, with no capital but their labor; and no resources but the crude elements of nature. The iron ore was there in rich abundance but its richness seemed an objection to many experienced workmen.

Far away in a new settlement in Southern Utah the first iron factory was established by those colonizers under Mr. Smith. An iron company was organized and work on a factory begun. So anxious were the men to see the building completed that they removed the tires from their wagons and used them for making machinery for the foundry. Experiments had already been made with a small blast furnace, and a small amount of iron had been produced, out of which Burr Frost, a blacksmith of Parowan, had made some horseshoe nails.

The work of these early miners in Utah was heroic. They dragged coal from the mines on sleds; they pulled sagebrush and kept large piles of it on hand before the flue, that it should not go out and thus injure the lining of the furnace. The crops had to be cared for and often the smeltermen were compelled to leave their work to attend to the fields and gather in the wheat and potatoes. Yet in October, 1852, George A. Smith was able to display a pair of andirons and some pig iron, and it was announced in February, 1853, through the *Deseret News*, that a small portion of the iron had been converted into steel.

In 1851, Governor Young issued a call to the Utah men who were abroad to try to send experienced iron workers to Utah, "who can make iron from magnetic ore of the best quality and machinery for slitting and cutting nails and drawing wire." Erastus Snow was in Sweden at the time and, going to England he made a study of the great iron factories of that country, and while there organized the Deseret Iron Company of Liverpool in 1852. He succeeded in disposing of enough stock to net \$16,000, and returned home that year. "Uncle" John Chatterly, in his journal says:

"We might also mention that about this time the first gold discovered in Iron County was found at Parowan in the craw of a chicken."

The Deseret Iron Company which had been organized in England erected a blast furnace and began the manufacture of iron from the ore in the nearby mountains. Their plan was to send the pig iron to Salt Lake City, where it could be made into all sorts of articles for the Californian and South American trades. This plant located on the bank of Coal Creek,

at a point just east of what is now the tourist camp ground, was the first iron foundry west of the Mississippi. Charcoal was used as fuel. The men in charge were nearly all men who had worked in the iron foundries of the Old World. Ore was free and plentiful and the work began in earnest.

The following report is taken from the *Millennial Star*:

A report of Erastus Snow and Franklin D. Richards, general agents and managers of the Deseret Iron Company, which was presented at this first general meeting held in Cedar City, November, 1853: "Our labor on behalf of the company commenced previous to its organization, while we were in England. We had received instructions to organize a company for the manufacture of iron in the Utah territory. We commenced our operations on April 6, 1852, in London. April 28 and 29, at 15 Wilton Street, Liverpool, England, the company was organized with a subscription of four thousand pounds stock, to be paid on or before January 1, 1853."

Upon their arrival in Salt Lake City, August, 1853, they reported to Brigham Young the organization of the Deseret Iron Company. He advised them to establish works in Iron County as soon as their funds would allow. There were no funds in the company's treasury and subscriptions could not be made available under one year, yet these men were anxious to begin operation. They proceeded on their own credit to borrow money and with money and credit to purchase the goods with which they commenced the business of the Deseret Iron Company at Cedar City, Iron County, Utah. This company was chartered by the Territorial Legislature, January 17, 1853, and was incorporated for \$20,000. The Territorial Assembly made an appropriation of \$7,000. The Church and individuals also contributed to aid in the opening of the coal mines. They thought it advisable to postpone further experiments with the furnace and direct their energies to the opening of the coal mines, and working of a good road to them.

During the winter of 1852-1853, quantities of charcoal and birch pine wood were prepared with a view to put the furnace into operation in the spring. The result proved most conclusively that that kind of fuel would not answer the desired purpose, as only small quantities of iron were produced at great expense.

On September 3, 1853, a terrible flood swept down Coal Creek, carrying before it all bridges and dams, completely inundating the site of the iron works and sweeping away much of the company's property. This flood, however, did away with some of the difficulties in supplying the furnace from the mines of Coal Creek.

Several veins of coal were discovered. The company's attention was directed to one which traced for several miles on the precipitous side of the mountain at a great elevation above the valley. This vein proved of excellent quality, with seven feet of pure coal, and about two feet more separated from the main body by a thin strata of rock and fire clay. This coal bank was within seven miles of the iron works. After its discovery there seemed to be nothing needed but a suitable furnace and a proper combination of materials to produce iron in any desirable quantity. This coal was opened up and a good road made to it at an expense of \$6,000.

Although great exertions were made by the company to obtain a quantity of coal in the winter of 1852-1854, little was accomplished on account of the accumulations of snow and ice in the canyon, which rendered the coal mine almost inaccessible.

In a letter written by Isaac C. Haight, he says:

"The foundation of a new furnace was laid about May 25, 1854. It is 21 feet square, of red sandstone, carried up perpendicularly 12 feet above the ground, then tapered 18 feet to the top. The tunnel head is 8 feet, making the furnace 28 feet to the top of the tunnel head. It is six and one-half feet in the boshes and three and one-half feet at the tunnel head inside, and 13 feet square outside. The lining is of porous sand stone, that will stand the fire well. The reason for lining with rock is that we cannot get fire brick. The hearth is of grey sand stone."

In a letter September 24, 1854, he reported:

The furnace is now completed and is said to be as good as any seen in England or any other country, we also have six coke ovens and intend to add six others. We have enlarged the water wheel four feet and made circular cylinders three and one-half feet in diameter. They work admirably and will give a blast of two and one-half pounds to the square inch. It took 650 tons of rock to build this furnace, and it cost \$3,782.45."

You must remember that the iron foundry and mines were 300 miles from the railroad, and that the roads at times were almost impassable. Because of the terrible cost of shipping the pig iron to Salt Lake City, and then that of shipping the manufactured articles to the coast by team, the project failed and the company was forced to close down the plant in 1859.

Imagine, if you can, the dismay of the settlers when they were ordered to close down the furnace and to strengthen the fort walls to keep Indians out. These people, 300 miles south of Salt Lake City, were practically in a wilderness where even the population was scattered. But what an heroic attempt it was to develop the iron industry. The Urie Journal speaks of "a pair of engines of thirty horsepower being brought to the iron works."

The industry had developed sufficiently to make andirons, plowshares, nails, flatirons, and cog wheels for machinery. The one much prized relic of those days is a bell, now on display at the Cedar City Carnegie Library, on which hangs a placard with the inscription, "Made in 1856 from native iron by the Cedar City Pioneers." This bell was rung for years from the roof of the "Townsend Tavern," in Salt Lake City. When the announcement was made that the iron works had to close down, old Mr. Townsend said that the bell should always ring from his hotel to tell the people that Utah would some day produce iron and coal in abundance, and that in these mountains great foundries would be built and the iron of this state would go to the far parts of the earth.

The old bell finally came back to its own and for years it rang for weddings, funerals, meetings, political and religious; it gave the alarm of danger from fire or flood; it signaled the hour for the cows to be taken to and from the pasture; it told the time for gathering at balls and theaters.

In honor of its origin and service this old relic took a trip to Salt Lake City and was on display at the State Capitol. Its last venture was at Provo, Utah, where its peel announced the opening session of Utah Steel Day, June 2, 1924.

An interesting story is told of the days when the iron foundry was still in operation. In the fall of 1857, when Johnston's Army was advancing on Salt Lake City and the entire territory was preparing for the worst, the people of Iron County decided to have some bullets made at the iron works. Accordingly sixteen teams, four from each of the four larger settlements, were sent to the mines in southeast Nevada for ore.

The journey was made in safety and the mines located, but there were no miners at the mines. As these men expected to find miners there, they took no picks or shovels with them with which to dig the ore. They had no inclination, however, to return empty handed after making so long and tedious a journey, so it was decided that they should try to locate some lead ore with which to load their wagons. At last they succeeded in locating a slide of rock which looked like the ore at the mine. This deposit was far up on the side hill. No way could be found to carry it down. They overcame this difficulty, however, by fastening up the tops of their buckskin trousers and filing them with ore. They then put one leg over each shoulder and carried it down the hill quite easily. They continued this until their wagons were filled. When these men reached home the lead was made into bullets, to be held in readiness for the invading army.—Clara Farnsworth.

GENERAL CONNOR AND THE MORMONS

The gold rush of 1849 drew many classes of people to California, and Salt Lake City being the one oasis in the desert, drew its share of the immigrants on their way to California. A story is told that a foreigner named Mogo operated a brewery south of Salt Lake City. Wishing to sell his business venture he conceived a novel way of getting a good price. Calling together several prominent anti-Mormon men he told them that he had discovered gold near his property, but the Mormons must know nothing of it. He claimed the Pioneers had hunted for gold but they could not find it, and he was afraid they would come and take his find. The deception worked. He divided his property into thirty shares at one thousand dollars per share. His new friends bought up the shares. Going to his property, one man stood on guard while the others went in search of the gold. They returned with several sacks of dirt and proceeded to pan the dirt. But they found no gold. One man finding they had been robbed asked for Mogo, but he was on his way to Camp Floyd, while the men made their way back to Salt Lake.

The gold and silver mining record of Utah dates back to the arrival of General Connor in Utah, commanding a force of United States soldiers to look after some Indians who were committing depredations. They immediately established camp on the bench east of the city. Some time later "The West Mountain Mining District" was organized, under the direction of Connor. Following this he published a circular to the world that "The strongest evidence that the mountains and canyons in the territory of Utah abounds in rich veins of gold, silver, copper and other materials, and for the purpose of opening up the country to a new, hardy, and industrious population, deems it important that prospecting for minerals should

not be untrammelled, but fostered by every means." He then offered the protection of the army for prospectors. In March, 1864, he issued another circular which was very threatening to the leaders of the Mormon pioneers. In July, 1864, Connor made a report to the war department, part of which follows:

"As set forth in former communications, my policy has been to invite hither a large Gentile population, sufficient by peaceful means and through the ballot box to overwhelm the Mormons by force of numbers, and thus wrest from the Church—disloyal and traitorous to the core—the absolute control of temporal and civic affairs. . . . With this in view I have bent every energy and means of which I was possessed, both personal and official, toward the discovery and development of the mining resources of the territory, using without stint the soldiers of my command. . . ."

These circulars and reports aroused in the public mind the thought that the Mormons did not want any mines opened. They did not realize that vast numbers of people were arriving in the valley every year that must be fed and that the leaders were fearful of famine if men left their farms to seek gold. President Young's policy was well founded.

From the different stories told, and the records that have come down to us, we are led to believe that the real story of Utah mining offers romantic history. The story of the prospector, who actually encountered situations that seem impossible, in the search for buried treasures will go down in history, as the man who tried to make his dreams come true. The Utah prospector was generally poor in this world's goods, but he was rich in faith, promises and confident that the hills would give of their wealth. After getting his burro, a few blankets, a prospector's pick, shovel and drill, his next job was getting someone who believed in him to "grub stake" for a few months. Then off to the hills where in the pursuit of his labor he would meet "Love and hate, joy and sorrow, peace and tragedy, friendship and enmity, hope and despair, hunger, thirst, deprivations, success and failure—all have come his way in alternating certainty." Many prospectors lived such a life in the Alta district.

General Connor, who commanded the United States troops at Camp Douglas in 1863 and 1864, was somewhat of a naturalist, as he loved to organize groups and go into the canyons. It is said that on one of these trips, the wife of the army surgeon picked up a piece of silver bearing quartz, which she thought was valuable. The party were camped near a hill north of Little Cottonwood Canyon. When the officer's wife returned to camp she told the soldiers that they must be camped on a mountain of silver.

Meanwhile a Mr. Ogilvie and others were logging in the canyons southwest of Salt Lake City, when Ogilvie found a piece of ore which he sent to General Connor, who had it assayed. Finding it to be paying ore, a party was organized among the soldiers who went to the canyon and the Jordan mine was located. A meeting was held at Gardner's Mill on the Jordan River where laws governing the ownership of the mine were adopted. Bishop Archibald Gardner was elected recorder. Immediately General Connor gave a furlough to many of the soldiers and sent them into the hills to prospect for precious metals.

Eli B. Kelsey, feeling that the time had come to develop the mining resources of Utah, left for the east to try his luck in interesting capitalists to develop the claims. The result was that in the fall of 1870, William M. Fliess of New York, and others, advanced money, and mining in Utah became a reality. Men from all parts of the country attracted by Kelsey's speeches in the east as well as by articles appearing in the eastern press, hastened to Utah to try their luck. Then continued additions to population, good crops, more land under cultivation, enough for all to eat and a surplus, and by degrees the bars were let down and Utah men now took part in the mining industry. The following incident gives proof of this:

"In 1869, Stephen Bliss Moore in company with Ed Peck, Joe Hyde and Sid Worsley discovered some silver claims in Utah. Ever ambitious and progressive he organized a party to prospect a vast region now known as West Tintic. Returning from a hard and fruitless search, they were passing the Oquirrh range just as the sun was setting. Its rays fell upon a ledge which looked interesting, so they decided to camp there that night and explore the ledge the next morning. The result was the discovery of the "Sunbeam," which marked the beginning of mining in that district.

"One day during this trying period, Stephen met President Young and Joseph F. Smith in Goshen. President Young stopped and said to Stephen, 'I hear you have been mining?' 'Yes,' answered Stephen. 'Don't you know it is against my orders?' 'Yes,' 'Well, what do you intend to do?' Stephen answered, 'I intend to keep on mining.' President Young paused a moment, then said, 'Well, go ahead, and may God bless you.'"—Taken from *History of Eleanor Colton Moore, Wife of Stephen Moore*.

THE ALTA DISTRICT

J. B. Woodman had for many months prospected in Little Cottonwood Canyon without any measure of success. Later in the winter he was about to give up when he secured the backing of two Salt Lake merchants to "grub stake" him to some flour and meat. Then Woodman and his partner waded back through the snows in the canyon to where they had previously opened a small vein about 90 feet, where the vein had ended. But now they started to dig with renewed energy and within a month had opened a vein that became the famous Emma Mine. It had a wild and exciting history, but its discovery made Utah a mining state. April, 1871, the Emma Mine, under the direction of Woodman, Walker Brothers and Woodhull Brothers was creating a sensation among capitalists. One year later negotiations were made whereby the owners sold the controlling interest to capitalists in far away England. Within a short time the rich vein of silver and gold ore ran out, and suddenly the Emma Mine was worthless. It had produced more than ten million dollars. A congressional investigation was started as the cry went forth that worthless stock had been sold to capitalists. Diplomatic correspondence was exchanged between England and United States and for many years this property was the cause of dispute.

Other mines that proved good producers in this district were the Flagstaff, North Star, Magnet, and Monitor. Ore from these mines was freighted down Little Cottonwood Canyon by ox teams to Ogden, thence

by rail to San Francisco, and some of it was carried around Cape Horn to Swansea, Wales, for smelting and refining. Nevertheless the town of Alta flourished, as the ore was rich in precious metals. It is said that in 1874, nearly 5,000 people lived in the Canyon camp, five breweries, six sawmills, hotels, stores, and numerous other enterprises had been established. Loss of the Emma vein, the lowering of the national price of silver and loss of confidence caused the town to disappear. In 1874, a snowslide killed sixty men, and much of Alta was buried.

MINING IN PARK CITY

It is a well known fact that after the discovery of ore in Cottonwood Canyon that prospectors drifted across the range of mountains, trying to find new mines. In 1869, the Walker and Webster claim was staked out and relatively few claims that amounted to anything were filed in the Park City area until the discovery of the Ontario ledge in 1872. Park City is located thirty miles east of Salt Lake City, in a beautiful basin among the slopes of the Wasatch range. It is a thriving city, and it marks one of the natural silver storehouses of the world.

PARK CITY

There are several versions given on the discovery of Ontario mine property. One is that Herman Budden, an Austrian sailor and adventurer, had come to Utah from California. Budden had heard of the Emma Mine in Cottonwood and wandered over the adjoining hills hoping to make a strike. On the 19th of July, 1872, he found a knob of rock that looked like silver bearing ore. This according to some historians was the beginning of the Ontario mine.

Others however claim that Rector Steen, also an adventurer, was coming down Ontario canyon, July 15, 1872, idly swinging his prospector's hammer, when he broke off a piece of rock revealing the silver ore. This is supposed to have led to the discovery of the \$50,000,000 Ontario with its miles of underground workings. Steen was said to have been accompanied by John Kain and Gus McDowell. Steen describes his part in the discovery in the following way:

"We had camped in a brush shanty for six months at a branch just below the Ontario, waiting for the snow to melt off. I went then to what is called the Badger mine and on June 15, 1872, we discovered the Ontario. When we discovered it we found a knob of ore sticking out of the ground. We had the rock assayed and it went through from 100 to 400 ounces to the ton. We sold it on August 21, 1872, for \$27,000 to George Hearst, afterward United States senator from California, and owner of the *San Francisco Examiner*. R. Craig Chambers was made superintendent of the mine. The Ontario at first was handicapped by streams of underground water which necessitated the installation of a giant engine to pump out the water. The old Ontario Silver Mining Company was incorporated in December, 1876.

The second great mine to be opened in this district was the Daly property which was incorporated in February, 1885, and in '86 was operating on a large scale. The White Pine, Utah & Anchor Mining Company

was formed March 25, 1885. In the same year the Anchor Shaft was started and was sunk 600 feet, when it was "drowned out." Dozens of other mining properties are located in Park City, sometimes spoken of as the greatest silver camp in the world.

Among the men who have helped to build this camp were Martin McGrath and his partner, W. H. Dodge, who located the Silver King claims in 1889. These claims were bought by Thomas Kearns, David Keith, W. R. Rice, A. V. Emery and John Judge, who paid the owners \$65,000 for the property. No mention of Park City can be made without honoring the name of David Chase McLaughlin, who was closely identified with the growth and development of the city and accomplished much in making Park City a good place to live. Other men known in mining circles of the town include Pat Kerwin, H. C. Townsend, Jim Haggin, partner of Hearst, William Curtis, S. L. Raddon, and Colonel O'Shaughnessy.

A story is told that William Randolph Hearst, well known publisher, had a narrow escape from death, when as a boy he took a drop of sixty feet in one of the shafts of the mine. He and a friend were on their way home from California after graduating from Harvard. They visited the Ontario and while descending a shaft, a clutch failed to work and before it caught, the cage carrying the boys had dropped sixty feet with a crash. The cage tender paled, but the boy calmly asked him if the cage always stopped that way. After being assured that the stop was a little out of the ordinary, the young men finished their trip through the mine.

Senator Kearns and David Keith shared many enterprises on a fifty-fifty basis. Both were Canadian born and they worked together for many years. Mr. Kearns was a shrewd business man, but the welfare of the men was his chief problem. It is said of him that he instituted a benefit system for his men long before any compensation laws were created. When a delegate to the state constitutional convention, he introduced and secured adoption of an eight-hour working day, and in 1901 he was elected to the United States Senate.

John J. Daly, owner of the Daly Mining Company was a man of splendid courage. As a boy of 17 he had been called upon to cross 200 miles of hostile territory between Fort Peck and Fort Benton, Montana, alone for mail. Ezra Thompson, a native Salt Laker, prospered in Park City, then returned to the city of his birth and became its mayor in 1899.

MERCUR

I was a city once!
Down my streets clattered
The heavy ore wagons, the tread
Of hoofs. Through swinging doors
Of the saloon came the sound
Of laughter and fight, the babbling songs
Of dancehall girls—And men
Who wished to stay alive.
Were meek, or handy with a forty-five.

I was a city once!
Until my veins ran dry
And the gold and silver men wanted

I could give no more. People
Moved away and left me alone
With those who lingered there
On Boothill. The dust of time, decay
Descended upon me, enveloped all,
Till I, alone, remained to take the curtain call.
—Mercur Joe.

The discovery of gold and silver indications in the old Lewiston district brought a host of gold seekers in 1869-1870, but as the first tests did not indicate a paying proposition, it was not until two years later that the town of Lewiston sprang up. Prospectors had found silver and the Sparrowhawk mine drew to Lewiston a population of twelve to fifteen hundred people. This camp did not last and in a few years only one inhabitant, Moses Manning, remained.

In 1880, a German named Pinedo, prospecting in the district found traces of quick silver and turned his attention to mining several claims. He gave the name of Mercur to the camp. Pinedo finally became discouraged and left. But always in the minds of the prospectors was the thought that some day Mercur would boom. In 1895, the process of extracting gold by Cyanide milling was tried and found successful. Before this the assays would reveal high percentages of gold, but attempts to pan it would reveal nothing. Then with the new process, Mercur mines gave up millions of dollars worth of gold, and the rock that had stood in the way of the silver miners now was priceless.

MINING TO TOOELE COUNTY

Camp Floyd was located in Lewiston Canyon, which was afterwards known as Mercur. Early accounts of purchasing shows sugar at one hundred dollars a sack, ink one dollar a bottle, jam two dollars a jar, and oysters two and one-half dollars a can, prices no doubt comparable to other gold camps of that period.

"Golden Gate Mine," rich in gold; the "Sacramento," a quicksilver mine, and "Geyser-Marian," also a gold mine, were the most important early mines. The population of Mercur one time exceeded that of Tooele City and there was talk of moving the county seat to Mercur because of its growth and activity. For many years there has been no mining there, the mines having "played out," but recently with better machinery and more knowledge of refining, the old "workings" are being processed again and made to show a profit. "Sunshine" was another gold mine south of Mercur, valuable in its day. One of the famous mines of Tooele County was "Miner's Delight," a silver and lead mine. It was changed to Ophir Hill when Senator W. A. Clark of Montana acquired it. Still producing.

RUSH VALLEY

One of the earliest mines in Rush Valley district was the "Basin Mine." The name was later changed to "Honerine" at the suggestion of Mary Ann Riley whose husband was employed there. This mine is about two miles north and east of Stockton. Stockton is on the Union Pacific Railroad and was named after the city in California by that name.

The "King" and "Ben Harrison" were two lead and silver mines in

the same locality. Most of this mining property is now known as "Combined Metals" with headquarters at Bauer and are still producing.

When General P. E. Connor came to Utah in 1862 from California and Nevada, they first settled at Fort Crittenden in Cedar Valley, where Johnston's Army had camped before. They went to Salt Lake County and established Fort Douglas. Connor sent more of his men out to Rush Valley to cut and haul cord wood to Fort Douglas. In this way they found mineral and began to locate and work claims. The Indians knew of this mineral wealth and told them of the mine known as "Hidden Treasure" in Dry Canyon near Ophir. Cyrus Tolman, one of Tooele's earliest pioneers hauled ore from the "Hidden Treasure" with ox-team. William Jennings of Salt Lake and Thomas Lee of Tooele hauled ore from that mine but it was never a paying proposition for them. John England is supposed to be the first man to haul ore with a horse team. He had to take his cart apart and carry the parts up the mountains to the mine then put it together and load it with sacks of ore and haul it to Salt Lake.

Then there was a Toll Road built under the direction of Matt Gisfon to haul the ore from the "Mono," rich in silver. Other mines in Dry Canyon are "Kearsarge," east of the "Mono," rich in silver; "Old Chicago," south and east of Kearsarge; "Queen of the Hills," and "Buckhorn."

First lead and silver bullion was smelted at the Waterman Smelter, at the north end of Rush Lake, about a mile west of Stockton. The smelter used charcoal, the making of which made work for the people of Tooele. Later the Chicago Smelter was built by William G. Godbe and Benjamin Hampton of Salt Lake City. Ore was brought by aerial tramway from Dry Canyon and after the toll road was built, mule teams did the hauling eight miles to a wagon.

In the year 1870 the mining camp called Jacob City was located at the head of Dry Canyon. It is what might be called a double string town, being located in a Gulch, the sides of which are very precipitous. The houses had the appearance of being lean-to's, that is they all leaned to the mountains and were generally built of logs with the exception of the hotel and one or two others, which were built of red wood lumber. The mines were situated around and above the town in the form of a semi-circle. The hill or mountain on which they are located resembling very much in general appearance a prairie-dog town on a mammoth scale, so thickly were the mines located, each particular mine having its own trail, road, or footpath leading to it, from the town or main trunk road, which gave the surface of the ground a curious criss-cross look. In 1875-76 Jacobs City was a thriving burg, and contained several fine stores, two first-class eating houses and two rival meat markets, etc., but the gambling and drinking saloons were greatly in majority.

Martinsville was located south of Stockton about three miles, so named because the houses composing the village closely resembled the domicile of the bird of the name. It was later named Slagtown. This town was situated near the mouth of Soldiers' Canyon. It contained eight houses, six of which were saloons.

North and west of Grantsville is the old "Monarch Mine." A new mill is going up there to work over the old ore dumps. Ibapah or Deep Creek, located in the extreme western part of Tooele County had two gold mines "Gold Hill" and "Midas" not active at present.

Prominent mining men of Stockton besides the ones already mentioned were Emil, Max, and Oscar Radatz, brothers. Thomas Mackinson, Con O'Rourke, John F. Connor, of Ophir and Mercur, Captain De La Mare, eastern mining engineer, Colonel E. A. Wall and Duncan McVichy, George Dern, former governor, and his father John Dern, and D. C. Jackling. Some of these men were better known for their holdings in other parts of the state especially E. J. Raddatz and D. C. Jackling.—*Roxie Lee.*

BINGHAM CANYON

A story is told that in the very early days of Utah part of the Church cattle were run in Bingham Canyon, under the direction of Thomas Bingham and his sons. Brother Bingham and his sons found some mineral ore and took it to President Young, who told them to say nothing of it, as he was afraid the people would desert their farms and seek gold. He also told the Bingham men that the news would create excitement and people in the east would rush to Utah. President Young was conscious of the fact that gold and other precious metals were plentiful in the nearby hills, but he counseled the Bingham family to think nothing of it. Bingham Canyon received its name from this family who built a cabin in the hills and for some time made their home there.

Years went by, and then in 1863, the Jordan mining claim was filed upon and the west mountain district organized to embrace what is at present known as Bingham. The discovery of placer gold the next year was heralded throughout the nation and so many gold seekers came to Utah that soon every likely spot in the streams and hills had been filed upon. So around the first claim, "the Jordan," the United States Mining Company was built. In 1887 a group of claims were filed upon by Enos A. Wall. Then Captain J. L. Lamar and later two engineers, Robert G. Gemmel and D. C. Jackling made an extensive study of the possibilities. They made certain recommendations which seemed too expensive for De Lamar, so he let go of his holdings. Jackling soon afterward interested the Penroses of Colorado and a Mr. MacNiels to finance his ideas. The result is the famous Utah Copper Company.

The Highland Boy, as a gold mine was almost a failure when it was learned that copper was its leading metal. Headed by Samuel Newhouse the properties were mined from this angle and proved very successful, operating under the name of the Utah-Delaware Mining Company. Other properties gave forth their wealth, and today Bingham offers employment to thousands of men. It claims to be the only incorporated city that has only one street.

SILVER REEF

Once a thriving mining town, with a population of nearly 2,000 people, Silver Reef now remains only a memory to the few remaining miners who lived in this famous town in Washington County. There are records that show that silver was known to be present in the sandstone as early as 1866, but it was not until 1870 that development was made of any strikes or claims. Several stories have been written of the discovery of gold in Silver Reef. One that is told by all old timers claims that a certain assayer in Pioche, Nevada, did not play fair with the men who sent ore to be assayed, plainly speaking they accused him of being dishonest, so to test him they sent a specimen of a pulverized grindstone. His returns

showed 200 ounces of silver to the ton. Now they knew he was unfair, so he was told to go while his going was good. He found out where the sandstone came from and hastened to the district and discovered silver. People in Leeds claim that Alma Angel made the grindstone and a man named Alexander took it to Pioche. Here let us recall that many of our early pioneers made a business of freighting to Pioche, hauling ore, drygoods, machinery, food, always taking a load and bringing back another. Another prominent story told of discovery of silver in Silver Reef, is that a traveler stopped to rest at a place in Leeds and saw a metal substance dripping from the sandstone fireplace. He had it assayed and found the metal was silver.

Sometime in the seventies W. T. Barbee (some connect him with the grindstone story) prospecting in this district found some pieces of petrified sagebrush and twigs, covered with globules of silver. He took them to Salt Lake City, interested the Walker Brothers, who outfitted him for a return prospecting trip to Silver Reef, where he filed several claims. Upon receiving a favorable report from Barbee, Walker Brothers sent experts to the district but they returned condemning the properties because "Silver did not exist in sandstone." But they turned the claims to Barbee, who proceeded to work in the district until he proved he was right. To his credit it must be said that the district produced \$8,000,000 worth of silver. Barbee built a town calling it "Bonanza City," but later the name was changed to Silver Reef, the white sandstone against the predominant red produced such contrast. The Tecumseh mine was located by Barbee. So silver was taken from sandstone.

Another well-known prospector who visited the Silver Reef in the late sixties was John Kemple. He was an experienced prospector and while prospecting in this locality found silver in the sandstone. In 1874 he returned and organized the Harrisburg mining District.

Silver Reef boasted schools, churches, a newspaper, a bank, express office, brewery, and nearly every western known fraternal society had an organization in the old mining camp.

In the late seventies many of the mines consolidated. Mills were built that could crush the ore by better processes and all went well. Silver was selling at \$1.20 an ounce, the ore was easily mined and milled. Then came a decrease in the national price of silver, wages were cut and mine unions would not accept the cuts, quarrels took place between employer and employee, miners were arrested and convicted of being disturbers of the peace, silver continued to go down in price, men were not receiving good wages and by 1890 most of the mines had ceased to operate. Later some of the local Washington County men secured leases and worked the various properties, but they were not financially successful ventures.

Among the prominent men identified with the Silver Reef mining properties were Colonel E. A. Wall, whose ventures did not turn out very well; James N. Louder, newspaperman, postmaster and lawyer; James C. Liddle, merchant; Sam Wing, Chinese merchant whom Colonel Wall gave money to visit the land of his birth, Father Scanlon, Catholic Priest who helped establish a hospital for men.

TINTIC DISTRICT

Told by Joseph Wirthlin

In 1878, when a boy of 12 Mr. Wirthlin burned charcoal four miles

northwest of Diamond, a material used for blacksmithing in the district. While the various camps around Eureka had their gambling dens and saloons characteristic of western mining camps, on a whole their population was made up of a splendid class of people, there were many educated men, many college graduates, many craftsmen, engaged in mining because of the love of the game. They were big in heart and big in mind, ever ready to alleviate the needs of any who suffered misfortune. The Tintic Mining district was organized in 1869.

The Tintic District was fortunate in having to promote the development of its resources such men as John Q. Packard, whose generosity in donating part of his fortune made at Tintic built the Salt Lake Public Library. James E. Berkeley, who came from the east for his health, in the early '70's and became assayer at the Shoebridge Mill at Ironton. John Beck was one of the promoters of the Bullion Beck and Champion Mining Company. It was his money that brought into being the first paying sugar factory in the west.

John Bestelmeyer was a pioneer prospector of the Tintic District. In 1890 he went to this district when the Spy, the Carrisa, the Utah Consolidated, the Centennial Eureka, the Mammoth, the Godiva, and the Bullion Beck and Champion were flourishing. Mr. Bestelmeyer performed amazing feats of industry and perseverance. He would walk the forty-five miles from Eureka Bullion to Provo to visit his family. Mr. Bestelmeyer alone sank the Silver King shaft to a depth of 110 feet. To do this he had to drill, blast, load the bucket and climb to the top and hoist the heavy load to the top. It was never his luck to enjoy the fruits of wealth and success.

Even the great ore body of Tintic Standard Mine was bought from Bestelmeyer, George Havercamp and others, and was not discovered until several years after John Bestelmeyer's death in 1912 in the open hills he had learned to love so well.

John H. McChrystal was one of the most skillful and wisest mining men that ever hit the west. He was superintendent of Eureka Hill Mine, also the Gemine Mine. Other men whose faith in the possibilities of the district was never shaken were Sam and Will McIntyre, Pat Donnelly, Denny Peck Sullivan.

The McIntyres owned large holdings in Texas and they decided to move to Utah. They sold their Texas property and bought cattle with the money, drove the cattle to Salt Lake Valley. In looking for a good range for their cattle they met Charley Crismon who told them of the good range in Tintic Valley, where bunch and wheat grass were plentiful. Later Crismon traded his share in the Mammoth Mine to the McIntyre boys for cattle; that was the beginning of McIntyre's interests in Tintic District. The McIntyre men were powerful men, standing over six feet tall and built in proportion to their height.—*Maude C. Melville.*

MAMMOTH MINE

Mining was first begun at this mine by pioneer Charles Crismon, and his associates in 1874. The Mammoth was one of the three famous bonanzas in the limestone, whose ores outcropped on the surface. All of the other famous Tintic mines in the limestone are classified as blind lodes.

The Mammoth ore bodies lie in three distinctly segregated shoots—copper, gold, and silver. Some of the ore ran as high as 43% copper. One

day one of the miners became convinced that as much rich ore was being thrown away as was being shipped; an assay was made and his contention was proven to be right for this waste carried high value in gold and silver, so a small mill and smelter was built and this waste preserved. This Mammoth claims the distinction of shipping the richest ore ever mined in the district. One carload shipped in 1907 carried approximately \$107,000 in gold. Mr. Blanchard is authority for the information that 12 other carloads were valued at \$100,000 or slightly more. It is still producing very valuable ore.

EUREKA HILL MINE

The first rich ore picked up on the surface was by men gathering wood among the cedars. This precipitated quite an excitement, and when the rights of the property owners were threatened by the notorious gunmen and claim jumpers, Morgan Courtenay, and his band from Pioche, Watson Nesbitt, who was in charge of operations at the time, had all the cedars cut off the mountains for a considerable distance on all sides so that shelter could not be offered sharp shooters. A stone fort was built and manned by guards. The determined front shown by his men frightened Courtenay and his claim jumpers away. Later Courtenay was killed in a gun fight at Pioche.

Between four and five hundred million dollars has been taken from Tintic District. Dr. John H. McChrystal said, August, 1932:

"Tintic is not dead, but merely sleeping, awaiting the magic touch of the restoration of silver, lead, zinc, and copper to their proper levels, the people still remain, the riches still remain. All that is required is a readjustment."

JESSE KNIGHT AS A MINING MAN

On one occasion Jesse Knight had been prospecting on the east side of the Godiva mountain all by himself, and sat down under a pine tree to rest, when to his surprise, he heard a voice distinctly say to him: "This country is here for the Mormons." He was awake at the time and surprised at the message, never fully realizing its meaning, but naturally believed that it pertained to mining in that locality where he was at the time prospecting in his own way. He was not a geologist, but he studied carefully the class of lime rock in which the ores of the other mines in that locality were formed, and used that as his guide in prospecting. He tried to impress upon his children that any money they should get should be used wisely, for he thought it was being shown to him for the purpose of doing good.

Uncle Jesse employed two experts with jack-hammers, instruments used in drilling holes in which the powder is packed for blasting. Together with J. Will Knight, the men began operations in the Humbug tunnel which was then at a depth of one hundred and fifty feet, having been dug to this during the assessment work on the property. The work was divided into three shifts, each of the three men working for a period of eight hours doing the jack-hammer work. The dirt blasted up by the three miners was hauled to the mouth of the tunnel in a wheelbarrow, by Uncle Jesse Knight himself. The ore was found in August, 1896, after two months of continuous work. One can imagine the excitement in camp—although Uncle Jesse took things calm, as things had turned out only as he had known they

would. As Jesse Knight wheeled the first barrow of rich lead ore from the mouth of the tunnel and dumped it on the ground, he said: "I have done the last day's work that I ever expect to do. I expect to give employment and make work from now on for other people." Uncle Jesse Knight fully believed that he had been chosen by God to act as steward in developing and distributing this great wealth where it would do the most good among His people.—*Mary Wilkins Tanner.*

EARLY MINING IN BEAVER COUNTY

During the early fifties the Indians led the whites to what was called Rollins Mine, which is located about ten miles east from Milford and about four miles north of Minersville. The owners of the mine were John Rollins, for whom the mine was named, John W. Bradshaw, L. L. Swabb, Milton Clements, Lucius A. Billings, John Osborn, Julian Bausman, Charles Burk, Levi Clements, John Cummings, Thomas Bates, and Joseph Hannover. Work was started about 1878. The Cave Mine was first discovered by John W. Bradshaw, and later he sold it to Ben Hampton and a Mr. Godbe. The Croft Mines are also in the Lincoln District. Mines in this district have deposits of lead, copper, silver and gold.

From the time the Lincoln Mine was discovered until 1880 other mines were located. The Bonanza, now known as the Horn Silver, was located by Samuel Hawks and James Ryan, September 24, 1875. In 1879 the owners were B. Byram and A. G. Campbell. The General Managers of the Horn Silver Mining Co., were Harry C. Hill in 1879, and Philo T. Farnsworth in 1884. Mr. Farnsworth retired March 1, 1907, and Melvin Morris was then made manager. Other early managers were Thomas Couch, George Hall, Mike Cody, Josiah Osborn, David H. Schneck and John Ellison. The Horn Silver Mine was closed after a cave-in in the mine. There were no casualties as the men were not at work at the time of the cave-in. The Tintic Lead Mining Company purchased the Horn Silver Mine in 1932, with L. N. Morrison as president. Other mines in the district are the Rob Roy, Harrington, Hickory, Montreal, Moscow, and Cactus.

Over a period of seventy-five years, camps have flourished and then vanished. Frisco was called the wildest camp in Utah. It was located near the Horn Silver Mine, and at one time the population was near six thousand. Homes were mostly of frame structure, although some were of brick and rock from the nearby quarries. The larger business houses were built of brick or rock. There were numerous saloons and gambling houses. In of the rougher element the women were never seen intoxicated on the streets of Frisco. There was a "Little Red School House" located in Frisco where the children of the camp were taught the three R's. There was but one teacher and he taught all children from the first to the fifth grades.

Frisco was a melting pot of many nationalities. Chinese, Italian, Irish, Spanish, Finns, and many others besides the English were among those who made up the population of the mining camp. It is evident that there would be many religions represented, too, but we have been unable to find any record of the early churches there. Women of this town were very brave indeed and when the need arose they were always at hand to perform any task. They were loving, courageous and strong in character. Margaret Elmer Williams of the Williams Hotel in old Milford, exhibited much courage when she gave first aid to David Reese who had lost both arms and one eye in an explosion in the Cave Mine.

Frisco was the only camp having a cemetery and many early residents were buried there.

Newhouse, a more modern camp, was located west of Frisco. The Cactus Mine was the main mine in operation and was also one of the oldest in that district. The town was named for Samuel Newhouse, a promoter. Capital to finance his mining properties came from Europe. Matt Newhouse, a brother of Samuel Newhouse, resided in Paris and while he took care of the developments here, Matt secured the necessary capital abroad.

People rushed to Newhouse as soon as they learned about the new camp. Homes were scarce and many lived in tents or covered wagons until homes could be erected. Some of the homes were built of frame or stucco and were made modern with water and lights. Rent for one of those homes was only \$10.10, including the water and lights. Unlike Frisco, the one saloon was situated one mile from town. In town there was a club house called the Cactus, which housed a library for the miners and their families, as well as a bar. Pure water was piped to Newhouse from the Wah Wah Springs which were five miles away. At Christmas time the mining company furnished a community Christmas tree and free gifts to all its children. The amusements were varied. They included dancing, ball games and house parties. Newhouse also boasted a fine livery stable.

Like Frisco, Newhouse is a town of the past. People had their joys and sorrows but only the stories of adventure and romance will live on as they are handed down from one generation to another for there is hardly anything left of these once thriving communities.

BRIEF HISTORY OF EARLY MINING IN WESTERN UTAH —NOW NEVADA

The State of Nevada came into being through the discovery and development of the Comstock Lode. Hence, the history of the Comstock Lode is to a great extent the history of Nevada.

The range of mountains in which the great mineral vein of Western Utah (Nevada) was situated is separated from the eastern slope of the Sierra Nevada, by a continuous parallel depression, which is divided into the smaller valleys of the Truckee, Washoe and Carson Rivers. Irregular in outline and height, the culminating point of elevation is a peak eighteen miles from Carson City, known as Sun Peak, sometimes called Mount Pleasant, and later named Mount Davidson. Down the south side of the peak runs a ravine to the Carson River, which is called Gold Canyon.

It was in this canyon that the first gold was found by one Abner Blackburn, who together with his brother and H. S. Beattie, had come to Nevada with the company of men who left Salt Lake City to go to the gold fields of California. The gold found at this time, however, was not in quantities sufficient to cause any excitement among the saints. No mining was done by Beattie's company, which returned to Salt Lake City the same season. But on his second visit to California, Beattie informed the Mormon company in California of the discovery and subsequently some of them, with immigrants from the states on their way to California, stopped to mine for a while in Gold canyon. The gold it produced was poor, being worth no more than fourteen dollars per ounce, but the diggings continued

to pay a fair day's wages, and there were generally one to two hundred men working in the mining season. Gold canyon was the only mining ground worked in this district before 1857. About a mile from Mount Davidson, near the head of a ravine is a mound which in 1858 was named Gold Hill, to distinguish it from Gold canyon.

As early as 1849 two brothers, E. Allen Grosch and Hosea B. Grosch, of Reading, Pennsylvania, educated and serious minded young men, came to the Pacific coast and engaged in mining in El Dorado County, California, in 1851, hearing of the Gold canyon placers, they paid them a visit but returned to California. In 1853 they made another and longer visit, prospecting in Carson and Washoe Valleys, Gold Canyon and in some of the adjacent mountains. In Gold Canyon they found what they called "carbonate of silver," which they described as a dark gray mass, tarnished by sulphuric acid in the water. The ore we found at the forks of the canyon, a large quartz vein, shows itself. Other ore of silver we have found in the canyon and a rock called black rock, very abundant, we think contains silver. In 1857 the Grosch Brothers were living in a stone cabin in Ameri-can Flat ravine. In a letter to their father, they spoke of a mine which had been named Frank, after a Mexican who was an experienced miner and who corroborated their impressions concerning the nature of their discoveries. They also spoke of "our monster vein," and a "smaller but richer vein," etc. But the development of silver mines required capital and in order to obtain it a company was formed, called the Utah Enterprise company, and another formed partly from El Dorado County, California, and Carson Valley. There was not much money in either, for in the autumn of 1857 they were waiting for a partner named Brown who kept a mail station on the Humboldt, to close his season's operation and bring his profits to be applied to the opening of what they called the Pioneer Claim.

While they waited, Brown was murdered. About the same time Hosea stuck a pick into his foot, from which blood poisoning resulted and he died on September 2. A friend, however, had offered aid, and Allen having to go to California on business, started about the middle of November with one other person, to cross the mountains. They were caught in a terrible snow storm, compelled to kill and eat their pack mule and to abandon their baggage and specimens. They wandered in the trackless waste for eleven days, but finally reached a camp of a Mexican miner on the west side. Their legs were frozen above the knees. Grosch would not submit to an amputation and died December 19, 1857.

When Allen Grosch left for California he left his cabin in charge of Henry T. P. Comstock, a miner in Gold Canyon, who had been in Western Utah since 1856. Whether he knew anything of the plans of the Grosch brothers previous to coming into possession of their books and papers is not known, but their books, papers and evidence of their company and individual rights disappeared, and all traces of their claims which might lead to identification by either of the companies or by the heirs of the Grosch brothers was removed. Comstock remained in Gold Canyon, keeping a silent watch on the progress of discovery and ready to profit by it.

In the summer of 1857 a number of men from Gold Canyon prospecting in Six Mile Canyon discovered a new field about a mile below the ground now occupied by Virginia City. The gold was not found in sand

and gravel but in blue clay so tough that it had to be dissolved to free the metal. From \$5 to \$13.50, the value of an ounce, was a day's pay. In 1858 these same miners returned, although still puzzled at the peculiar features of the ore. Others came in and were forced to take claims higher up the canyon. Among these, was James Fenimore, a Virginian, who because of some breach of the law was hiding in Carson Valley since 1851. He was called "Old Virginia," and it was after this man that Virginia City, formerly Johnstown, was finally named.

In January, 1859, during some warm weather, prospecting in Gold Canyon was resumed by the residents of Johnstown, and among others, were James Fenimore, John Bishop and H. T. Comstock. On the 29th, after examining the head of the canyon and finding the prospects rich, although the gold was fine, Comstock, Fenimore and others staked off claims and called the place Gold Hill. In connection with their claims, Fenimore discovered and claimed a spring of water which could be brought to their ground.

Although the gravel in which the Gold Canyon miners were working was evidently decomposed quartz and almost black in color, no one appears to have guessed the secret of it at this period. The miners in Six Mile Canyon continued to work their claims which as they advanced to the head, became darker in color. In June, being short of water, they excavated a small reservoir a short distance above their claims to collect water from a rivulet for the use of their rockers. At a depth of four feet they came to a stratum of strange looking earth, the nature of which they did not understand. It is on record, however, that Comstock, who appears to have been watching the movements of prospectors, immediately appeared and remarked, "You have struck it boys." The persons addressed were McLaughlin and O'Riley. At the same time he told them that the spring from which they were taking their water belonged to himself and others. As McLaughlin and O'Riley tested their discovery and found it to be as rich as it was queer, Comstock further informed them that the ground they were on belonged to Fenimore, Joseph Kirby, James White and William Hart and he proposed an agreement whereby he was admitted to a firm consisting of Penrod, Comstock, McLaughlin and O'Riley. As the claim was evidently a valuable one and could not be worked without the water Comstock controlled, the proposition was agreed to. He paid \$50 for the claims of the claimants, only three of whom could be found. He secured Fenimore's interest in the spring for an old blind horse. But there still remained a Joseph D. Winters who had secured the right of the mining share owner and to avoid litigation, he was admitted to the company. For only a week did this claim continue to pay in the rich decomposed ore and then the miners came on to a solid ledge four feet in width, which Penrod declared was quartz. Comstock finally agreeing with this, they restaked the claims under the California laws for lode mining. Comstock staked 300 feet for himself and then 100 feet to be segregated by himself and Penrod, wherever he should choose in the company's claim for securing O'Riley's and McLaughlin's claims. By this method, without even having discovered anything and always claiming everything in a loud voice, and by displaying stolen knowledge from the Grosch brothers papers, Comstock caused people to talk about the "Comstock Lode." Many located

claims upon it, the ore was sent to California to be assayed and at the astonishing returns, came hordes of new adventurers, who quickly converted the quiet haunts of Western Utah into roaring mining camps. The first claim to be recorded in Western Utah was located by James Fennimore, lying west of the Comstock and called Virginia Lead. The second was by Comstock & Company called the Ophir and was the first located on the Comstock Lode.

Other mines both placer and quartz had been discovered in other parts of what is now Nevada, previous to any locations in Carson Valley. As early as 1849 an immigrant named Hardin, while hunting with two other men discovered silver in the Black Rock Range in Humboldt County. In 1857 quartz mines were discovered in the Reese River country. The Potosi silver mines, situated eighteen miles from Las Vegas was discovered by the Mormons about the time the Reese River mines were discovered. Brigham Young, believing them to be lead, sent a party of miners to work them, in anticipation of the war with the United States, but the product proved too hard for bullets and the mines were abandoned.

In June, 1867, four companies consolidated under the name of the Virginia Consolidated Mining Company. They went deeply into debt and at this time the mining firm of James G. Fair, John W. McKay, James C. Flood and William S. O'Brien bought their holdings for \$80,000. Their investment proved justifiable. They struck a fifteen foot stratum of ore and the size and richness of the ore increased throughout the year. In a short time a quarter of a million dollars was taken out.—*Gladys Huyck.*

THE COKE OVENS OF WYOMING

The coke ovens at Piedmont, Wyoming, were built in 1877, by Moses Byrne, five being constructed at a cost of fifteen hundred dollars. Quaking aspen and pine logs were hauled by ox teams to the ovens where they were burned into charcoal. The Union Pacific Railroad Company used the coke as fuel for the passenger cars.

The coke ovens at Hillard were considerably smaller and were built in 1879. The charcoal that was made at Hillard was used for a smelter which stood nearby. Ore called mill tailings, was hauled from the mines at Park City, and silver, gold, copper, and lead were extracted from this ore. Copper ore from a mine called the Dyre located near Vernal, Utah, was hauled in by mule teams. A large flume was built and the waters diverted from the Mill Creek were turned into flume. Logs were then floated to the Hillard ovens. Today, about fifteen of these ovens are still standing and the ruins of twenty more are visible.—*Henrietta Slade.*

Following is an account of the Wyoming ovens by John C. Mackay:

"I went to Hillard in July, 1882, and as I approached the camp I thought the kilns were Indian wickiups. At that time there were eight kilns at Hillard and four at Piedmont. The kilns are constructed in a cone shape, with one opening to put in wood and when filled the opening is closed and sealed up so the wood would burn and make charcoal. Some of the charcoal was shipped to smelters in Utah and Colorado for fluxing purposes.

"Mr. George Carlton, Union Pacific agent at Hillard, had charge of operations. It was a paying business. The wood was cut

about twenty miles south of Hillard, a flume was built and logs floated down to Hillard for a sawmill and for the kilns. The camp had a hotel, store, restaurant and one saloon. In addition, there were a number of frame buildings and dwellings. It was a wild and lively town, had everything that went with the wild and woolly west."

PLACER GOLD IN IDAHO

The history of Idaho begins with the discovery of gold within its boundaries. The records from which stories of that discovery are obtained must of necessity be written ones. There are few old timers from whom one can learn first hand about some of the incidents, some of the strikes that were made; some of the towns that grew topsy-turvy amid piles of gravel thrown aside after the gold had been washed from it. There are but few now living who entered Idaho in '62 and '63, a very few who first sifted the sands and helped build the towns that grew frenziedly while gold could be had for the taking. Indeed, there are only remnants of most of the towns they founded, only names, wrecks for the most part with ghosts of those gone before as their inhabitants.

When one contemplates the hegira of Ed Pierce and his followers from the fading excitement of the California gold fields to that first important discovery of gold in Idaho a touch of romance is added to the facts if one believes the tale the old timers like to tell.

It seems that an Indian—not a Digger Indian, stood one day and watched Ed Pierce clean his rifles of the day's accumulation on his claim in California. He was much interested in the progress and becoming better acquainted learned a little more of the value of the stuff the white man made such a do about. It was from him that Mr. Pierce learned about a brilliant stone existing somewhere in the land from which he came—a stone so bright the eye dare not gaze upon it fixed in the side of a canyon. The location of this canyon he described so graphically that Ed carried a complete set of directions about with him in his head while he worked and made plans and preparations to go in search of that priceless gem that was to be his when he reached it, and so in time it came about that he journeyed north in search of a diamond and found instead some more of the yellow grains that have been the ruling impulse behind the influx of men into the far places that is our West.

Arriving near his hoped for destination the Pierce party found its way impeded by a treaty between the Indians and the U. S. Government. The country they wished to explore was situated in Indian Territory. They would have been completely foiled in the realization of their desires and in the achievement of an event that had so much to do with the future of Idaho had not an Indian maiden, Jane, daughter of Timothy, become his guide to lead him by a roundabout way into that country and out again with some of her tribesmen in hot pursuit. The State of Idaho owes a lot to Jane.

It was on a summer evening in 1860 that one of Ed Pierce's men washed 15 cents worth of gold from a single pan of the black sand of Canal Gulch near Orofino. That was the beginning of great days—soon

after the trample of thousands of men filled the hills, the city of Lewiston was born and grew up in less than a year. Other camps were founded, pack trains, and later, stages reached far into the mountains to Florence, to Pierce, Dixey, and Warrens.

It was a long journey in those days between the territory of Washington and Washington, D. C. The protest of the Indians who resented this wholesale invasion of their land was blandly ignored or shown to be futile in face of the frenzy that attends the shout of "Gold!" It would have taken a strong army to have stemmed that tide once it started, so though perhaps injustice was perpetrated it has been justified in the name of progress. In the light of these later years one cannot blame the Nez Perce Indians when in 1877 under the leadership of Chief Joseph, they tried to resist with arms what they failed to accomplish by treaty.

There seems to exist a distinct parallel between the motives that prompted Ed Pierce to the discovery of gold in Canal Gulch and Moses Splawn to lead a party into the Boise Basin. As Splawn tells it, an Indian's description of the basin led him to search and eventually discover the richest field in Idaho—some say the richest for its size, in the world. The following are some excerpts from his own account of his discovery:

"While mining in Elk City, Idaho, in the summer of 1861, there often came to our camp a Bannock Indian who would watch us clean up the sluices and gather the gold after the day's work was done. The latter part of the summer, I left Elk City and went to a new discovery near Salmon River.

"I was among the first arrivals in the camp of Florence and here I again met this Indian, who still showed his interest in the yellow metal that was being taken out of the ground. When the early snows had come and further mining was difficult, I saddled and packed my horses and started for Walla Walla, where I intended to pass the winter. While camped at the mouth of Slate Creek, on Salmon River, I again met the Bannock Indian. We had met so many times in the past few months, we had become quite friendly. While we talked and smoked around the campfire that night he told me of a Basin in the mountains far to the south, where he had, when a boy, picked up chunks of yellow metal such as he had seen me work out of the gravel. His earnest look and painstaking description made me believe the story, and I felt, if I ever came near I would recognize the mountains that surrounded the rich basin. The following Spring, 1862, I determined to find, if possible, the country described by my Indian friend. It was no easy matter as the Indians were well known to be hostile and it was necessary for a reasonable number of men to travel together to insure any degree of safety.

"On reaching Auburn, we found Captain Tom Turner with fifty men from the Willamette Valley, going to Catherine Creek above the Owyhee in search of the Blue Bucket 'diggin's,' a lost mine supposed to have been seen by a company of emigrants in 1845. The name was derived from the fact that the emigrants claimed that they could have picked up a blue bucket full of the yellow metal. (This blue bucket was a large kind of bucket used in those days.) We agreed to join Captain Turner's company provided if he failed to find the lost mine, he would then join us and go on the north side of the

SNAKE RIVER in search of this rich basin. This agreement was accepted by both parties and we started on our journey.

"Arriving at the country where the lost mine was supposed to be, diligent search was made, but it was of no avail. But here we found what was known later as Silver City 'diggin's.' The men who found the gold here were Jordan, Jack Reynolds, and some others of Turner's party.

"All this time it seemed to me that something kept telling me that I could look into the distance and see the mountains for which I was searching. I asked Turner at this place to fulfill his part of the agreement, to cross the Snake River to the north side. I made a speech to the company, reminding them of their agreement and telling them what I believed we would find. My position was then voted upon. Several of Turner's men voted to go with us. Turner then said: 'If you will go with me to the next creek emptying into Snake River above here, and we fail to find what we are searching for, I then agree to go with you on the north side of Snake River.'

Space will not permit Splawn's detailed account. He left the Turner party accompanied by seven men and was on his way back when he met George Grimes, also in company with seven men whom he induced to follow him north of the Snake River. The story as he tells it is an exciting one—how a group attempted to cross the Snake River on a raft but without success, of their fear of Indians, of their being stranded on an island when their raft sank, of his eventual reunion with the rest of his party and of their finally succeeding in making a boat with which they crossed the Snake River, of their proceeding up the Boise River from its confluence with the Snake, of an Indian scare which turned out to be a bluff when they met with a show of arms, of their crossing the divide and their first view of the basin as he had visioned it, of their shortage of food and its replenishment with Indian's dried salmon, of George Grimes' premonition of death at the hands of the Indians, of their arrival at the place where the town of Centerville now stands where Fogus, one of the party put his shovel in the dirt and like the follower of Ed Pierce washed out a small amount of gold. Continuing Moses Splawn's account:

"We moved on to where Pioneer now stands, stopped at this camp two days, then over Pilot Knob and camped on the creek at noon. Mounting a horse, I rode up to the head of the creek, where I climbed a tall fir tree and cut a Catholic cross in the top of it. From this tree I could see a cut-off which we afterwards used in our retreat.

"On coming down from the tree to where my horse stood, I saw an Indian and bear tracks. I mounted my horse quickly and rode down the hill and over the underbrush to the creek. In passing through this fearful entanglement, my trousers were torn off, my shirt in shreds, my limbs and body cut in many places. I arrived in camp after dark, bruised and sore. The men put plasters on my back and gathered pitch from the firs and put on the cuts on my body.

"The next day the men were busy sinking prospect holes. Pro-

visions were getting low about this time. About three o'clock in the afternoon, while the Portuguese were making me a pair of pants out of seamless sacks while I was asleep, Grimes came to camp and awakened me saying, "There is trouble here. These Portuguese say the Indians have been shooting at them while they were sinking prospect holes." I got up and looked around and seeing nothing, again laid down as I was still sick and sore from my wounds received the day before. I fell asleep but was soon awakened by the sound of voices and firearms. I got up and saw George Grimes with his shotgun in his hands close by. Taking up my gun, I went to him and together we made a charge up the hill in the direction of the shots. When we reached the top, it seemed as if twenty guns were fired in our faces. Grimes fell just as we reached the top. The last and only words he said were, "Mose, don't let them scalp me." Thus perished a brave and honorable man at a time when he stood ready to reap his reward.

"I called for the rest of the men to come to the top of the hill. We left a guard there and carried Grimes to a prospect hole and buried him, amid deep silence. He was our comrade and we had endured hardships and dangers together and we knew not whose turn would come next."

Then began their retreat, with nothing to eat, with fear riding at their heels, with the memory of their friend George Grimes stark in death. They finally succeeded in reaching the Snake, crossing it to join a party of emigrants led by Tim Goodell with whom they traveled to Walla Walla.

In the fall of 1862, parties under the leadership of Ralph Bledsoe, Marion Moore and Jeff Standifer with a party were the first to arrive in Boise Basin after the discovery became known. They were the beginning of a tide that rolled into the Basin, miners, merchants, mechanics, packers, gamblers, preachers, doctors and lawyers, every occupation, every creed, every people. Some traveled light for the 400 miles between Umatilla, Wallula, or Lewiston, and the new "diggings." Some purchased their own pack strings. Some could afford to hire them. Some came party to a regularly operated pack train soon in operation under the direction of John Hailey. Within two years after discovery, ferries bridged the rivers and stage lines vied for the patronage of the road. Within two years the population became stabilized. News of the rich placer strike brought not only miners but merchants and professional men of various professions. While the first miners used lumber—whip-sawed for their sluice boxes and cabins, the fall of 1862 brought the construction of a sawmill on Grimes Creek. Schools, churches, a newspaper, theatre, and gambling houses sprang up. It was the lure of gold, however, that brought most of these men into the Basin. The majority of them were comparatively young. Money was plentiful, drinking and gambling not only tolerated but expected. The true characters of these young men were brought out and developed for good or bad. Several of them have since become governors of our State.

Thus, amidst the hills, where two years before, a band of roving Indians murdered George Grimes, a community of rugged people in a

primitive environment rapidly underwent the transition from barbarism to conventionalism. Institutions essential to their conception of true civilization came into being as the blossom follows the bud. Order grew out of chaos. Other towns came into being—Rocky Bar, Loon Creek, Silver City, Delamar, Rubey and others were born. With each of them, the exodus from the now nearly worked out fields of Idaho City Placerville, Centerville, and Pioneerville depleted the population. Some quartz properties remain. Chinese came to rework the cast off rubble of their predecessors and in many cases to retire richer than those who previously worked the same ground. Some saw the wealth to be had in the fertile valleys adjacent. Homes were built for permanent habitation. The territory faction gradually sifted to other fields. The great flux of people into the Basin had brought the Capital of the Territory from Lewiston to Boise, on March 3, 1863.—*Helen Dalton, Boise Idaho.*

THE MINING CAMP

Generally speaking, the prospector chose the hills or mountains, gorges, gulches or ravines to start his diggings for the precious metals. And if in loosing them from their fastness, he made a paying strike, then a mining camp was born. The majority of mining camps occupy real beauty spots, where nature offers its best in trees, wild flowers and shrubs. Each camp lends its own personality. It may be established around one lone mine, but the majority of mining camps are built around a cluster of mines. The camp has grown into a town or even a city from the small beginning when the prospector unpacked his burro, made his camp, then went into the hills to commence his diggings. His outfit most likely consisted of his blankets, a frying pan, a coffee pot, a few groceries and his digging implements. Others hearing of his strike followed him to the spot, and soon the little outdoor camp grew into a few shanties. Traders, and learning of the lucky strike of ore, hastened to the camp with supplies, and it was not long until every occupation and trade were represented in the newly established camp. Most of the men were miners, men that dug out the treasure, following the lure of gold, fearless, undaunting; searching in the hills, sometimes fighting every step, but determined to find the treasure nature had left in the hills. But these men were kind hearted, genuine, true to their convictions and many of them seeking only a livelihood. The glamour for gold brought all classes of men, the adventurer; the ten-day prospector who went from camp to camp seeking the easy gold; the crook and gambler; and then of course the promoter, for it took money to get the silver and gold from the hills. Soon shops of every kind, schools for the miners' children, clubs where men's natural craving for company could be satisfied, hotels, board sidewalks along the one main street were built. A pool hall, a Chinese laundry or restaurant, a new boarding house would seemingly spring up over night. The shanties gave way to better houses, churches and hospitals were built, a garden planted here and there, and as mankind makes the best of his environment, the miner and his wife build for a better community. Only when one lives in such a town, mingles with its folks, partakes of its lure, sees the diggings, can he appreciate the folks who wrest hidden treasures from the hills.